



Stakeholder Research on Power Issues: South Asia Regional Findings



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Executive Summary

The South Asia Regional Initiative for Energy Cooperation and Development (SARI/Energy), funded by USAID, promotes mutually beneficial energy links among the nations of South Asia. One of SARI/Energy's key objectives is to increase awareness about energy issues that affect regional cooperation and investment in the sector. To inform communications with various stakeholders in the power sector, the Academy for Educational Development (AED) conducted in-depth research with almost 500 power sector stakeholders in India, Bangladesh, Nepal and Sri Lanka, including over 100 high level decision-makers from utilities, regulators, government, media, academia, and consumer groups (**Opinion Leaders**); and over 450 consumers (**Consumers**), from rural domestic to larger industrial consumers.

The primary objectives of this stakeholder research were to provide insights on:

- Stakeholder views of the most important power issues at a local, national, and regional level.
- Consumers' "willingness to pay" for power
- Regional energy cooperation awareness and knowledge
- Key power sector communication themes and credible sources of information

The qualitative approaches (interviews and focus groups) used in this research gathered cohesive and insightful data. While not statistically representative of all stakeholders in the region, these data can be reliably used to plan and implement communications about power issues with targeted stakeholder groups.

Key findings from the research include the following:

- While Opinion Leaders in Bangladesh, Sri Lanka, and Nepal do not hold identical views about the most important power sector issues, their views are more similar to each other than they are to the views held by India's Opinion Leaders. Opinion Leaders in the first three countries are more focused on creating affordable supply, while Indian Opinion Leaders were focused on distribution reform.
- While Opinion Leaders may hold different views on the largest issues facing the power sector, the perceptions of Consumers tend to be quite consistent across the four countries; essentially, what they want is not what they get. Attributes of power that Consumers seek most, but don't receive, are:
 - uninterrupted power supply
 - reliable power
 - available power during the day

- adequate voltage to run high-voltage equipment
 - power with no fluctuations
 - quality customer service
- Prevailing opinions on whether consumers are willing to pay the full price for all the power they use differs between Opinion Leader groups and between countries. Despite power theft and corruption in three of the four countries, many Opinion Leaders felt more consumers would pay if power reliability and services improved. Some Opinion Leaders pointed out that many consumers are not able to pay, even if they are willing.
- Consumers in every country, with the notable exception of Sri Lanka where consumers regularly pay their electric bills, had what they felt were good reasons for not paying for electricity, including:
 - Many opportunities to avoid paying, including bribing linesmen and stealing power
 - Corruption and poor service relieve customers of moral problems with not paying for power
 - History of subsidies and/or free power
 - Little chance of being caught and little punishment if caught
 - Peer pressure
 - Belief that their action cannot have a widespread impact
 - Lack of funds
- At the present time, there is little awareness or knowledge of regional power issues among of the 103 Opinion Leaders interviewed.
- Reliable power sector information on consumer issues such as power theft, corruption, reliability of service is scarce for both Opinion Leaders and Consumers in all four countries. Opinion Leaders agree that much more communication about these issues is needed before consumers can embrace their role in power sector reforms.
- Based on many findings from this research, we believe that the following broad communications themes will be effective in fostering power sector changes with stakeholders:
 - **Take Control: Stop power theft and corruption.**
 - **Take Part: Know your power rights and responsibilities**
 - **Take Heart: And now for some good news about the power sector.**

- While mass media advertising could be effectively used when trying to raise awareness among mass audiences, study results suggest that Opinion Leaders prefer more person-to-person approaches. Mass media would be quite expensive but would be appropriate for some aspects of communicating with consumers where general awareness needs to be raised. However, other avenues of communication, such as more personal approaches, would be needed to convey more in-depth information.

I. Introduction and Methods

A. Background

The South Asia Regional Initiative for Energy Cooperation and Development (SARI/Energy), funded by USAID, promotes mutually beneficial energy links among the nations of South Asia, including Bangladesh, Bhutan, India, Maldives, Nepal and Sri Lanka. One of SARI/Energy's key objectives is to increase awareness about energy issues that affect regional cooperation among the many stakeholders in the power sector, from political leaders to domestic consumers.

Bringing these issues to the attention of stakeholders can help clarify problems, dispel power sector misperceptions, and increase support for regional energy cooperation and investment. However, meeting the objective of increasing awareness among stakeholders requires addressing several major questions, including:

- Who are the energy stakeholders that need to be reached?
- What are their current perceptions about key energy issues?
- What messages need to be disseminated to change or mobilize perceptions toward greater regional energy cooperation?
- What are the best avenues for effective outreach to build greater regional energy awareness?

The current research evolved as part of USAID's multi-pronged approach to answering these questions and to enacting activities that would effectively move regional energy cooperation forward. Initial ideas for the research stemmed from a SARI/Energy Partners' Retreat held in January 2003 which explored commonly held beliefs and potential misperceptions (myths) about energy sector issues (e.g., consumer willingness to pay for power; the need for privatization) and from brief papers that the attendees prepared to discuss key myths.

Subsequently, USAID sponsored two separate, but complementary efforts to foster effective communication with stakeholders under SARI/Energy:

1. AED, working with research partners in India, Bangladesh, Nepal and Sri Lanka, undertook this research to characterize stakeholder perceptions on:
 - The most important power issues they saw facing them locally, nationally, and regionally
 - Consumers' willingness to pay for power (Note: Initially, this research was to cover several issues raised in the retreat session, but evolved to focus on this key "trigger" issue. USAID saw this as the highest priority issue and also wanted to ensure a manageable scope of work.)
 - Regional energy cooperation

- Key power sector themes and credible sources of information about power issues
2. Nexant, working with an advertising agency, developed a regional communications campaign. This campaign, with the South Asian Regional Energy Coalition (SAREC) as a primary sponsor, was researched and designed in mid-2003 and launched in the early fall of 2003. This campaign uses a unified message (“Energy makes good things happen.”) and theme (“The need for regional cooperation in energy has never been greater.”) as a platform to present a variety of regional energy issues. It uses a variety of media and activities and the agency is responsible for demonstrating its effectiveness.

B. Research Objectives

The primary objectives of this stakeholder research were to provide:

- In-depth data reflecting stakeholder views of the most important power issues at a local, national, and regional level.
- Insights from stakeholders about consumers’ willingness to pay for power
- Feedback on regional energy awareness and information
- Insights on themes and outreach mechanisms that would connect with various stakeholder groups. Although Nexant’s regional campaign would be launched before this more in-depth research could be accomplished, it was planned that future iterations of the campaign would make use of the results of this research.

In addition to these research objectives, this research had an added mission – to involve research partners in each of the countries in collecting and analyzing data. This involvement added value to the research by ensuring cultural familiarity and by increasing the expertise of local research institutions.

C. Methods

Based upon our limited review of other studies in the region, this study is the most comprehensive research to date to gather opinions from stakeholders on power issues in the SARI/Energy region. It gathered data from almost 500 targeted stakeholders across the region. The data are especially strong in reflecting the views of high level stakeholders (**Opinion Leaders**) in the region. In addition, substantial qualitative data were gathered from commercial, industrial, and domestic consumers (**Consumers**).

While the results are not appropriate for statistical analysis and do not represent all stakeholders, these in-depth, qualitative data are robust, cohesive, and insightful.

The data can be reliably used (and are appropriate to use) to help guide effective messaging and outreach decisions for the groups targeted in this research.

This research intentionally used qualitative approaches, so that we could:

- Gather nuances and detail in addition to overall findings.
- Hear how various stakeholders talked about and prioritized issues.
- Use the data to reliably inform the types of decisions that need to be made: the selection of communication themes and mechanisms to reach various target audiences.

In addition, the data will be useful for helping to construct any follow-on survey research if there were a desire to have more statistical data.

Working with our local research partners and with the support of USAID, AED designed and conducted research with the following individuals and groups (see Table 1 for a summary), including:

- In-depth interviews with 103 **Opinion Leaders**, from utilities, regulatory bodies, central government ministries, industry groups, media, agricultural groups, domestic consumer groups, and academia. Members of the AED SARI/E team conducted these interviews in partnership with the following individuals and organizations:
 - The Nepal Foundation for Advanced Studies (NEFAS)
 - The Sri Lanka Energy Managers Association (SLEMA)
 - The Administrative Staff College of India (ASCI)
 - The Bangladesh Center for Advanced Studies (BCAS)

In each country, we took care to identify a set of key Opinion Leaders and policy makers in the power sector that were representative, influential, and important to reach with further communications. In each country we concentrated on high population areas and/or centers of power (e.g., central ministries). Interviews with these Opinion Leaders were conducted by highly skilled interviewers, generally in person, and lasted 1 to 1½ hours.

- In-depth interviews with 76 paying and non-paying larger commercial and industrial **Consumers**. These open-ended interviews lasted 1 to 1½ hours. TNS Mode, a professional, full service research agency in New Delhi, with branches or affiliated agencies in other areas, conducted interviews in India, Bangladesh, and Nepal. Lanka Market Research Bureau Limited, also a full service research agency, worked in Sri Lanka.
- Focus groups with 300 **Consumers**, including urban paying customers; urban non-paying customers; rural non-paying customers; rural paying

customers; and shop owners. These focus groups represented various socioeconomic strata and included both men and women. As with the in-depth interviews, TNS Mode and Lanka Market Research Bureau Limited completed these tasks.

Table 1: Summary of Completed Interviews by Category and Country

Stakeholder Groups	India	Bangladesh	Nepal	Sri Lanka	TOTAL
Opinion Leaders	36	20	24	23	103
Larger Commercial/Industrial Consumers	42	14	14	6	76
Focus Groups with Consumers (about 8 per group**)					
? Domestic Urban Paying	48	16	16	32	112
? Domestic Urban Non-Paying	48	16	16	NA*	80
? Domestic Rural Non-Paying	32	16		NA*	48
? Domestic Rural Paying	32	16		NA*	48
? Shop Owners/Commercial				16	16
Total N across all groups	238	98	70	77	483**

*Non-paying customers could not be found in Sri Lanka

**Numbers are approximate, since focus group sizes varied.

This research was designed and implemented between May and September 2003, with focus groups being conducted in July and September 2003. To accomplish this research AED, in collaboration with USAID and its research partners took these steps.

1. Identified key Opinion Leader respondents.

AED developed an initial list of respondents in conjunction with USAID and regional experts. As the interviewing progressed, we asked respondents to identify further key individuals so that we could both expand and double-check the validity of our lists.

2. Identified and selected research partners and interviewers.

AED met and interviewed prospective partners to ensure that they had the right skills to conduct qualitative research, and that they had the background, interest, and ability to meet and interview senior influential stakeholders.

3. Developed interview and focus group discussion guides.

Working with USAID and our research partners, we developed open-ended discussion guides for the Opinion Leader and consumer interviews and focus groups. The instruments may be found in Appendix E.

4. Trained partners and collected and analyzed data.

For the Opinion Leader interviews, the AED team met with the research partners, trained them on the data collection instruments, accompanied them on several interviews, and debriefed them on the process, pointing out any needed changes or improvements. The research partners then conducted most of the remaining interviews and provided notes and a summary of findings to the AED team. We also worked closely with TNS Mode and Lanka Market Research to design and implement the in-depth interviews and focus groups.

5. Reported and presented findings.

Prior to this final report, the AED team presented key regional findings to USAID in New Delhi, and country findings in Bangladesh, Nepal, and Sri Lanka. This report provides more detailed findings and implications.

D. Caveat

This report presents the research findings from a regional perspective. However, the region, while geographically linked, is hugely diverse. A key finding of this research is that many Opinion Leaders and Consumer stakeholders:

- Do not hold a regional view of power issues
- Have little knowledge of power issues in the region
- Looked at power issues in terms of their own doorstep, within their area, or within their country.

Of necessity, then, taking a regional viewpoint involves comparing the findings across the individual countries, and pointing out where countries are both similar and different. (Individual country “topline” reports may be found in Appendices A through D. Supporting research reports round out the Appendices)

II. Stakeholder Views of the Most Important Power Issues

This section addresses the first primary objective of this study: to better understand, from the point of view of both Opinion Leader and Consumer stakeholders, their opinions about the most important power issues and problems facing them, their countries, and the region. These findings can be especially valuable in developing sensitive outreach and content for national and regional power issues discussions, and for ongoing communications, since they reflect both the similarities and differences across the countries. The views of Opinion Leaders are discussed first, followed by Consumer opinions.

A. Opinion Leader Views

When Opinion Leaders were asked to describe the single most important power issue facing their countries, significant differences emerged between India and Bangladesh, Sri Lanka, and Nepal, as shown in Table 2 below. Indian Opinion Leaders most often cited the “need for distribution reform” as the central issue, while in Bangladesh, Sri Lanka and Nepal, the central issue was the “need for more affordable supply.” Although the three smaller countries are grouped together, they also have some key differences, some of which are noted in parentheses. The findings are a good reminder of the different viewpoints around the region and the danger of seeing the region as homogenous in terms of power issues.

Under these “distribution reform” and “affordable supply” umbrellas, Opinion Leaders listed a host of interrelated symptoms or contributing factors, but here too, most are dissimilar between India and the other three countries, even though they may sound similar. For instance, corruption in India for distribution reform crosses all stakeholder boundaries. However, corruption in Nepal for generation more often refers to corruption among public officials in their blocking of hydropower developments, but there is very little theft or corruption in the distribution arena.

Table 2: Most Important Power Issues for Opinion Leaders

India	Bangladesh, Sri Lanka, Nepal
<ul style="list-style-type: none">• Need for distribution reform<ul style="list-style-type: none">○ Consumer theft and non-payment○ Corruption at utility and political levels○ Mismanagement/lack of accountability○ Poor customer service○ Poor power quality, reliability, and many power cuts○ T&D technical losses	<ul style="list-style-type: none">• Need for more affordable supply<ul style="list-style-type: none">○ Power shortages○ Non-affordable power (Sri Lanka, Nepal)○ Constrained development funds○ Lack of power coverage○ Lack of infrastructure○ Corruption among public officials (Bangladesh, Nepal)○ Poor public policy (Sri Lanka)
<i>“The system is totally corrupt: producers, consumers, no one takes responsibility, everyone blames the other.” – Farmers’ Association</i>	<i>“Providing adequate electricity supply at affordable prices for all consumers” – Sri Lankan Government Official</i>

Indian Opinion Leaders, from academics to representatives of utilities and farmers and industry agreed that the power distribution system, both in technical and human terms, was the culprit. As one industry leader put it *“because distribution is a problem, everything is a problem.”* They felt that although India could use more supply, cleaning up the distribution problems would go a long way toward “righting” the system and making it viable.

As with the old story of the blind men trying to identify the elephant, Opinion Leaders in India focused on different aspects of the distribution animal, often because of their positions or the people they represented. In addition, some respondents spoke mostly about one element (e.g., an IPP representative targeted pricing; a donor targeted “financial un-viability of the sector”), while many respondents cited intertwining elements (e.g., an academic cited lack of fiscal discipline, old hardware, lack of political will, etc, all within the framework of “lack of professional management”).

While Opinion Leaders in Sri Lanka, Nepal, and Bangladesh do not hold identical views of the single most important power sector issue, they are more similar to each other than to India. In each country there is a lack of adequate, affordable power supply. In Sri Lanka most Opinion Leaders cited political interference, and lack of political will, as the key underlying factor producing this situation. As one governmental stakeholder said *“New power plants are blocked because politicians can’t make decisions, not because there is no money for them.”* The lack of low-cost power in Sri Lanka has created a dependence on high cost emergency power generated via diesel gensets. (Unofficially it is rumored that the diesel genset lobby is interested in preserving this dependence, and there is some evidence that generation projects do get stalled.)

The high tariff for power is the single most important issue facing Nepal according to most Opinion Leaders there. They felt the high tariff is brought about by high project costs due to corruption, stringent donor requirements, national topography that makes projects more difficult, and lack of basic infrastructure like roads. A few Opinion Leaders felt the most important power issue was the underutilization of the country’s hydropower potential and the lack of electrification in many areas.

Opinion Leaders in Bangladesh identified the lack of adequate power generation and system loss as the single most important issues. One utility leader said, *“the most important issues are shortage of generation of electricity. In addition, poor coordination and lack of integration between generation, transmission and distribution poses serious problems for the power sector. The problem has been aggravated due to the lack of financial capital and adequate investment in the sector.”*

Other key reasons for inadequate supply are corruption and stealing of power. As one Opinion Leader put it, *“Corruption and lack of accountability and transparency are the most important issues facing the power sector in Bangladesh. Corruption begins right from the start of project planning . . . and persists thereafter.”* Other Opinion Leaders talked about corruption at the distribution stage. Thus, Bangladesh appears to face an even more desperate level of corruption than India.

In addition to the central issues described above, some Opinion Leaders across the four countries noted that the following issues were important:

- Increasing consumer involvement
- Improving the visibility of power issues
- Considering the intersection of power and water issues

B. Consumer Views

While Opinion Leaders may hold different views on the largest issues facing the power sector, the perceptions of Consumers tend to be quite consistent across the four countries: *what Consumers want is not what they get.*

1. The Role of Power

In-depth interviews and focus groups across the four countries asked various types of consumers about the role that power plays in their lives and then asked them to evaluate their experience with the current power situation. Consumers feel power plays an indispensable role in their lives, and feel that their daily activities are stalled in the absence of power. With inadequate water supply, power becomes critical for accessing water. This need is more apparent in rural areas, where water is required for irrigation.

Power is also essential to keep mosquitoes at bay, to let children get their sleep at night, to allow them to study, to let people watch their favorite TV programs, and as a safeguard against security problems (thefts, break-ins). In Sri Lanka, electricity is also considered to be an indicator of the standard of living for lower income groups.

For commercial and industrial users, power is an essential and critical input into their business. This is true not only for the manufacturing sector but also for the small shop owners who cannot keep perishable items and drinks cool without electricity. When electricity is cut so is their income, and heavy losses occur.

2. Desired Attributes of Power

Given the background of the use and role of power, attributes of power that Consumers seek the most, but often don't receive, are:

- Uninterrupted power supply
- Reliable power. Consumers must know when they will have electricity and when they will not so that they can plan their activities accordingly.
- Power available during the day and for most, if not all, of the day. For rural consumers it is more critical to get access to power during the day when they need water to irrigate their fields. In some rural pockets of India consumers only have power at night.
- Adequate voltage, to run high voltage equipment and tube-lights
- Power with no fluctuations, so consumers can use expensive appliances without damaging them. While this need is more pronounced among industrial users who use expensive machinery, it was mentioned often by residential consumers as well.
- Good customer service. This is the interaction with the consumer on every aspect of power supply and is therefore the face that the utility presents to the consumer

3. Reality Versus Need: Gaps in the Current System

Consumers perceive huge gaps in the current delivery of power compared to what they need. They perceive gaps in power supply as well as in the types of customer services that are provided, as described below.

a. Power Supply Gaps

Supply side gaps discussed by Consumers included:

- **Frequent power cuts.** Urban areas face significant interruptions in power supply everyday. Rural areas typically face longer power cuts each day. The frequency and duration of power cuts increase during the peak consumption months (that is, during summers in India, Sri Lanka, and Bangladesh and during winters in Nepal).
- **Frequent power breakdowns.** Power breakdowns are not uncommon. These result in long spells of interruption (stretching up to 24 hours in some

cases), and the problem is more pronounced during the rainy season. In fact, the problem is so pronounced in Nepal that power supply is withdrawn as a precautionary measure, prior to the onset of rain/thunderstorm. Consumers believe that poor infrastructure (e.g. unsafe wiring and insufficient transformer cordoning) causes the frequent breakdowns. In cases where the breakdown affects a small pocket of houses/set-ups and in rural areas, consumers have to approach and fetch the linesmen and provide incentives for getting repair work done, or repairs will not be made.

- **Frequent voltage fluctuations.** Voltage fluctuations damage electrical appliances. Industrial users who risk damage to expensive machinery are the most affected. Voltage fluctuations occur more frequently in Nepal and Bangladesh than in India or Sri Lanka. In Nepal and Bangladesh, consumers believe that voltage is very high when supply is reinstated after a power cut, increasing the risk of damage to appliances.
- **Low voltage.** Voltage is often inadequate for using tube-lights and high voltage appliances. This problem is more pronounced in the rural areas of India and in Nepal. In Nepal, voltage is particularly low during the peak consumption hours in the evening. As a result, consumers switch high-voltage appliances on in the afternoon for use in the evening, so that there will be sufficient voltage to turn them on.
- **Untimely and limited supply.** Rural consumers in India are faced with long interruptions in power supply, especially during the day when they most need electricity to run irrigation pumps.

Because of the gaps in power supply, Consumers resort to using power back-ups like generators and invertors. Back-up power systems are most common in India. Rural consumers use alternate energy sources like diesel to run their irrigation pumps.

While most high-ticket appliances come with built-in power stabilizers, some consumers also use external stabilizers. Because of the higher costs, such practices are most common among relatively affluent consumers. Others simply lose their appliances and must wait until they can afford to repair or replace them.

b. Service Related Gaps

Service related gaps across the four countries included:

- **Inaccessible utility staff.** Consumers face difficulties in contacting customer service for information, to get problems resolved, or to get repairs made. Getting through on the telephone takes a long time, and even when

consumers personally visit the utility they are repeatedly directed to different personnel.

- **Lack of adequate information prior to and during power cuts.** Many utilities do not provide advance information about power cuts, nor is there any way for consumers to find out during a power cut how long the power will be out and the reason for the cut.
- **Inadequate response.** When Consumers bring problems such as questions about bills, repairing technical faults, etc. to the utility, these problems are not addressed in a timely manner. If the technical problem affects a limited area, then repairs take even longer. In Nepal, consumers have to arrange for transportation for utility employees to get any repair work done. In fact, Nepali consumers sometimes have to physically carry faulty meters to the utility to get the repaired. Some Sri Lankan consumers reported that they often have to bribe repairmen to fix problems.
- **Inappropriate conduct.** Consumers are often subjected to rude, high-handed and uncooperative behavior from utility employees. This problem was mentioned in all four countries. People attribute such behavior to utility service providers' apathy towards and indifference about consumers' needs.
- **Poor adherence to safety regulations.** Consumers most often cited situations where wiring was sub-optimal and where transformers were not cordoned off. Such poor adherence to safety regulations results in accidents (human and livestock injury and fatalities), and frequent breakdowns. Nepal seems to suffer from more breakdowns and accidents caused by sub-optimal wiring than do India and Bangladesh. This problem was not mentioned in Sri Lanka.
- **New connections.** Consumers discussed the problems and delays with getting new connections, and many said bluntly that it takes a bribe to get connected to the system. Corruption around new connections seems to be a much greater problem in India than in the other countries; in rural India it can take up to a year to get a connection activated and it may take even longer to get a meter installed. This does not seem to be an issue in Sri Lanka.
- **Corruption.** Many Consumers reported that utility employees have to be bribed before they will address the problems faced by the consumers. Consumers believe that if they do not bribe the utility staff, then the utility response to their problems will be delayed even more. Many consumers said that bribing is the only way to get the utility to respond. As mentioned

above, Nepali consumers expect to pay transportation expenses for linemen if they want their power problems to be addressed.

c. Billing and Collection System Gaps

The average billing and collection system in each of the four countries is intended to operate as follows:

1. **Consumption is assessed.** Most Consumers have meters installed, and their consumption is assessed through regular meter readings. In some rural areas consumers are charged flat monthly fees. Meter readers are supposed to take readings every billing cycle (once a month or once in two months).
2. **Bills are issued and delivered.** Bills are issued based on the meter reading. Bills must be paid by a specified date. While there is some grace period, varying by country, fines are levied after that time. In Nepal the bill is nominally reduced if it is paid early. Bills are either delivered by the utility staff or by private contractors hired for the purpose. In Nepal and in parts of AP (India), the meter is read on the spot and the meter reader hands over the bill.
3. **Payments are made.** While in India and Nepal, payment of the bills takes place at the local offices/counters runs by the utility, in Bangladesh, it takes place at designated banks. In most rural areas, payment is made at the local utility office or a designated bank operating to serve a pocket of villages. The prevailing practice in all four countries is for consumers to go in person to make payments. Payments are mostly made in cash; in fact, Nepal's "early bird" incentives encourage people to pay in cash. People may use local agents to physically go make the payments, or send employees to do it.

However, Consumers highlighted several gaps regarding billing and collection systems. These include the following.

- **Metering and Meter Reading Problems.** In Sri Lanka, consumer complaints about metering are associated with non-payment and with modern technology. Consumers wanted to see new meter technology installed and the system computerized, both to keep up with what is happening in other countries and to make it harder for consumers to steal power. In addition, meters are not read on a consistent basis, and residential consumers feel they are unfairly charged at a higher rate when the meter reader is late. Because the electricity tariff goes up with the number of kWh used, a later reading may bump a consumer up into the

next tariff block, so that their bill is higher. Industrial consumers, in contrast, had no complaints.

- **Billing Problems.** These problems range from errors to delayed receipt. In some cases, consumers never receive their bill. In cases of over-charging, consumers have to first pay the bill and then try to claim a refund, if the utility accepts that there is an error. Resolving such disputes takes several months and entails a lot of hassle. The problem is more pronounced for rural users who have to travel to the closest city to get billing errors corrected. In Nepal, consumers also indicated that they don't always understand the cost headings on the bills.
- **Bill Payment Problems.** In addition to the obvious problem of having to go in person and make the payment, the payment counters are limited, so Consumers have to travel a long distance to reach them, adding to the time of the overall transaction. In rural areas, one payment location caters to a number of villages. Payment times are also inconvenient since they clash with working hours; this contributes to some people delaying their payments. Many consumers are not aware that other payments options, such as direct payment through their banks, exist. Some utilities offer consumers the option to pay by check, but few consumers seem to be aware of this option. Consumers face more inconvenience in Nepal, Bangladesh, and Sri Lanka. Some of the problems they face include:
 - In Nepal the payment counters are very limited in number.
 - In Bangladesh certain banks are designated for collection. However, counters at these banks are not exclusively dedicated for collection, resulting in longer transactions for the consumers.
 - The CEB offices are slow, usually with long queues. While most customers pay their bills during their lunch hour, that's the hour when the CEB has fewer staff available so the lines tend to be very long. Consumers have the option of paying their bills at local banks or post offices, but many described paying their bills on time and then being assessed with late fees because the banks/post offices did not send the bills over to CEB in a timely manner. One residential consumer noted, *"My business is far from the main CEB office. It takes the whole morning for me to go and pay the bill. They should have more paying offices or better postal services, so that the bill can be paid by post."*

- **One Hopeful Model.** Some Opinion Leaders in India noted that the new regime in Andhra Pradesh has seen a big improvement in both billing and payment. Key features of the new system are:
 - Meter reading is physically verified for every billing cycle. It is then put into an electronic device that issues the bill on the spot. The bill is hand-delivered by the meter reader.
 - There are multiple payment counters with convenient locations and hours of operation. These counters are multi-purpose, i.e. they cater to transactions relating to other basic utilities like water, telephone, house tax, passport applications, etc. Consumers can complete more than one errand in one visit to a payment outlet.
 - In rural areas, there are designated central locations for making payments (e.g. the panchayat office), or mobile counters that travel to different locations within an area on specific days of the month.

III. Willingness to Pay

Another primary objective of this research was to examine stakeholder views of this critical power sector question:

“Are consumers willing to pay the full price for all the power they use?”

The research found that prevailing opinions differ between stakeholder groups and between countries, as discussed in this section.

A. Opinion Leader Views

1. India

Most of the 36 Indian Opinion Leaders interviewed did not agree with the notion that consumers were unwilling to pay for the power they used. While they agreed that theft (often referred to a “pilfering”) is rampant, they also believed that most consumers will pay if:

1. They are convinced that the costs included are legitimate and if they are offered reliable power of reasonable quality.
2. They see service improvements.
3. The opportunities for theft are stopped.

In fact, some noted that consumers often do pay for back-up and voltage stabilizers. And, as one former utility manager noted, *“Consumers pay for everything else – why not power?”*

Most leaders felt that it was primarily the rich and powerful that were indulging in theft and that they could get away with it. This, in turn, has had a cascading effect as others see some consumers get away with not paying and imitate the action. One media respondent offered a theory that it was the new rich and industrializing classes that were indulging in theft as it had become a way of life – one indulges in various unscrupulous activities to get rich fast and power pilferage was one dimension of a much larger social problem.

In general, while India Opinion Leaders tended to feel that some subsidies are required, they did not agree on what groups should be eligible for subsidies or what type of subsidies should be provided. (Note: A similar lack of consistency has been reflected in subsidy policies in India over the years.) Opinion Leaders said that the burden on the state governments would need to be limited if the sector were to work efficiently and that effective subsidy delivery mechanisms and energy auditing would be needed.

Although all agreed that “lifeline” consumers needed subsidies, respondents didn’t agree about a definition for these customers. Some respondents felt that it was the rural poor that required subsidies and that the urban poor could not be categorized as poor per se. Others felt that all poor would require subsidies but these subsidies would have to be targeted effectively. There were mixed responses concerning the ability of farmers to pay the full cost of power – NGOs and the media thought that it would not be possible given the present economics of farming but the utility managers and some of the regulators felt that it was possible for farmers to pay and the issue was too politicized.

There were various viewpoints regarding cross subsidies. While industrial and some utility managers thought it should be removed, NGOs and the media respondents thought cross subsidies must continue for the purposes of redistributive justice.

While all respondents felt that the benefits to the sector of consumers paying full cost for electricity would, without doubt be beneficial for the power sector, some also pointed out that if consumers who had very low ability to pay were charged full costs i.e. without subsidies, then a significant section of society would be deprived of the benefits of electricity which would have an adverse social impact.

2. Bangladesh

The twenty Opinion Leaders interviewed in Bangladesh were almost split down the middle when asked if consumers were willing to pay for the power they use. While some firmly felt consumers were willing to pay, others strongly disagreed. Those who believe consumers are willing to pay for power feel that the issue of willingness to pay is based on the perceived value of the service. They felt consumers need to be convinced of the legitimacy of the costs they are charged, and that they need to be offered reliable power of reasonable quality.

In contrast, other Bangladesh Opinion Leaders believe the issue is more one of ability to pay. As one utility leader said, *“There are consumers who cannot pay the full price of electricity on a regular basis. Poor domestic consumers, for example, sometimes find it difficult to pay the monthly bill.”* The willingness to pay with respect to urban and rural consumers, however, may not always be connected with ability. According to one utility leader, *“Although urban consumers are relatively rich, the bill collection is low in urban areas compared to the rural areas.”*

Still, other Opinion Leaders said that poor domestic consumers, although least able to pay, have to pay to avoid punishment through penalties, disconnection, and reconnection problems. Rich domestic and business consumers, on the other hand, are more often able to steal or take advantage of corruption among utility staff; in

addition, some Opinion Leaders said that government customers often don't pay. As a private sector opinion leader said, *"Some rich consumers, especially the industrial users, often fail to pay their bills regularly. The domestic consumers pay their bills more regularly than other categories of consumers."*

Many Opinion Leaders in Bangladesh expressed many of the same views about subsidies as their Indian counterparts, saying that some subsidies are likely needed, but not agreeing on who should receive subsidies or what type of subsidies should be provided.

3. Nepal

According to the 24 Opinion Leaders interviewed in Nepal, most consumers want to pay and do pay, but they are poor and often do without power, especially in rural areas. They did note that a few large consumers want to avoid paying.

Opinion Leaders believe that Nepal's consumers pay unnecessarily high prices because of corruption in the procurement process for power plants. And as in Bangladesh, stakeholders were evenly divided about whether or not consumers are willing to pay for power. One media representative noted that *"People want to pay their bills on time but need a quality power supply. Irregular and low quality power supply increases hidden costs of power and becomes a burden for ordinary consumers."*

The perception among most Opinion Leaders is that those who don't pay their electricity bills are those who believe they can get away with it, e.g. the wealthy and the powerful, including many government offices and even many utility staff.

A number of stakeholders believe that subsidies are needed for the poorest consumers, but others focused more strongly on the need to increase incomes rather than creating a subsidy system that could not be maintained over time.

4. Sri Lanka

The 23 Opinion Leaders interviewed in Sri Lanka agreed that most consumers pay their bills. This is despite very high prices that make it hard for Sri Lankan industry to be competitive globally, and for poorer consumers to pay. Opinion Leaders agreed that it is unfair that consumers are forced to pay higher electricity prices because decision makers in the government and utility have not made timely decisions about capacity expansion.

According to Opinion Leaders, culture, law, and utility policy contribute to Sri Lankans being better bill payers and having lower non-technical losses lower than other countries in the region. A utility manager noted that in Sri Lanka, *"The*

culture is such that they pay bills." In addition, legal sanctions are powerful: power theft is an offense for which no bail is offered in Sri Lanka. Finally, neither the CEB nor LECO gives consumers much of a grace period for paying outstanding bills. (CEB gives two months before disconnection and LECO only one month.) Opinion Leaders believe most consumers with large outstanding balances are government installations for which the payments are now being actively pursued.

When probed further about which consumer categories were more involved in stealing power, some utility leaders indicated that theft is more prevalent among larger industrial and commercial consumers. Still, most Opinion Leaders indicated that few consumers in any class steal power.

Opinion Leaders had mixed responses to the question of potential subsidies. While all are sympathetic toward the less fortunate, many do not think that offering subsidies would improve poverty. Instead the situation will be improved by economic growth and income generation. Electricity rates in Sri Lanka are already constructed so that large consumers (industry, large commercial establishments) subsidize small domestic consumers, and CEB is working to rationalize electricity tariffs by phasing out the cross subsidy over the next few years.

B. Consumer Views

1. India, Bangladesh, and Nepal

a. Stealing Power and Willingness to Pay

Many in the focus groups from India, Bangladesh, and Nepal acknowledged that either they had direct knowledge of others stealing power or that they did so themselves. At the same time, most consumers were clear that they would pay if they could get quality power and good service.

Those who do not pay their bills justify stealing power for these reasons:

- Huge opportunities to avoid paying, including technical ease and the frequency of linesmen openly accepting and even demanding bribes.
- Utility/political corruption and poor service relieves consumers of responsibility, morality.
- History of subsidies or free power.
- Little chance of being caught and no or few penalties if caught.
- Peer pressure ("odd one out").
- The impression that they small consumers cannot have an effect. As one consumer put it, *"We are small fry who steal only a little."*
- Consumers cannot afford to pay for electricity.

The three main factors that consumers cited for contributing to power theft – high tariffs, corruption, and lack of “ownership” – are discussed in more detail below.

- **High Tariffs.** One of the main objections consumers have is that they do not feel that tariffs are fair. Tariffs are grudgingly accepted in India and Bangladesh, but consumers in Nepal perceive tariffs as too high, and believe they are increased too often. Among the concerns given are the following:
 - Consumers perceive the incremental rate charged for consumption exceeding the basic slab to be unreasonable. They believe the incremental rate is levied on the entire consumption and on not just the marginal units that exceed the slab limit.
 - Rural users who do not have meters installed are dissatisfied since they have to pay a minimum charge regardless of power consumption.
 - In India and Bangladesh new electronic meters have been installed in many places. Consumers say the result is a sudden and significant rise in their bills.
 - Industrial and commercial establishments in India and Bangladesh express resentment that they are charged a higher tariff than residential consumers, particularly since they do not receive better power quality or reliability for the higher costs. Power is an expense that needs to be decreased to improve business profitability; this leads some industrial and commercial customers to resort to power theft.
- **Corruption.** Consumers report receiving poor service from their respective utilities when there are power outages or problems. In order to more efficiently overcome these problems and get them resolved, consumers often bribe utility workers. Consumers have gotten into the habit of offering bribes to get work done, and the utility workers expect bribes to do their work. As corruption is perceived to be rampant, consumers do not feel responsible for curbing their own behavior.
 - Consumers are presented with ample opportunities to avoid paying their bills or to reduce them. Linesmen and meter readers openly accept bribes from consumers for letting them pay less for power. The result is significant power theft.
 - The high incidence of such illegal practices makes them socially acceptable. Some consumers stated that *“in this day and age, resorting to such practices is necessary in order to get ahead.”* In India this idea is

deeply entrenched. Such acts are considered smart cost-saving practices. Refraining from them is seen as naïve and timid.

- Consumers also believe that corruption results in gross inefficiency, which cannot be rectified even if people pay up conscientiously. Nor do they fear getting caught. Consumers have not witnessed active enforcement of regulations against theft. Instead, they may receive warnings from utility staff prior to raids or checks. Nepal has recently implemented a policy of periodically transferring linesmen to different areas, which has reduced power theft.
- Corruption seems to be present at higher levels in some utilities. Consumers spoke of using their connections/contacts with higher-up utility staff to avoid paying their bills in full, a practice that seems to be more common among industrial consumers.
- **Lack of “Ownership.”** Consumers do not understand their role in the power equation. They seem to feel that electricity is a ‘sarkari’, a government commodity like water that is meant to be used free of charge and carelessly. It is considered a service provided by the government for the good of its citizens.

Domestic users tend to put the blame for power theft on big industries that are heavy consumers. They insist that theft by industries should be stopped first. This sentiment is stronger among people in Nepal.

b. Methods for Stealing Power

Consumers cited the following methods for stealing power:

- **Illegal Hooking.** This is where an unauthorized connection is taken from an electricity pole. This is more common in villages and in unauthorized construction pockets within cities. A key reason for the high incidence of this practice in rural areas is the long drawn out process of getting an authorized connection (as discussed earlier). Consumers will also connect to neighbor's lines in exchange for payment.
- **Bypassing the Meter.** This is accomplished by drawing the main power line directly to the house. Consumers do this more often at night when they are reasonably sure of not getting caught. Some do this for powering high voltage appliances like air conditioners.
- **Adjusting the Meter.** It is possible for consumers to manipulate some meters so that it moves more slowly. There are numerous ways of this that

range from placing a magnet on top of the meter to inserting a wire. Opportunities for tampering have been reduced in India and Bangladesh with the introduction of a new electronic meter (post privatization). Consumers have not yet figured out how to tamper with these meters. Another method for skewing results is to illegally install a second or third meter so that consumption will never move into the next price slab. Consumers will also fail to notify the utility of a malfunctioning meter.

- **Bribing the Meter Reader.** Some consumers make arrangements with their meter reader to write down lower readings in exchange for payments to the meter reader. This practice has picked up in recent times, as it has become more difficult to adjust meters.
- **Paying Domestic Rates.** Some commercial users (non-industrial) get away with paying domestic rates, usually through collusion with utility personnel. In India and Bangladesh commercial rates are substantially higher than domestic rates and so the related cost saving is significant.

2. Sri Lanka

Consistent with Sri Lankan Opinion Leaders, consumers in Sri Lanka reported that they and other consumers rarely steal power and regularly pay their electricity bills. Technical losses due to theft are very low (1-3%), despite the fact that Sri Lankan consumers experience many of the same power problems as those in other countries, especially with regard to high tariffs. Notably, unlike the other countries where we conducted research, it was not possible to organize focus groups of non-bill-paying customers.

While Sri Lankan consumers had heard of power theft, and some had heard about the methods for stealing power (for instance, installing ineffective meters), very few had ever done so. Those few who had stolen (“borrowed”) electricity had done so under extreme circumstance, such as needing power for a funeral. As one domestic consumer noted, *“Some say that you can bypass the meter and obtain the power supply, but this is stealing and if you get caught there is a big fine.”*

Most consumers do not believe it is possible to “borrow” electricity because CEB has taken steps to ensure that its wires are tamper proof. Even if it were possible to “borrow” power, consumer respondents felt that it would pose a severe threat to the lives of those involved. One focus group participant said, *“I have heard of people dying because they have got a large electrical shock due to the electricity not being properly connected.”* Industrial consumers claimed that only an isolated one or two consumers would take the risk of losing everything in order to increase profit by not paying their electricity bills.

A number of consumers mentioned they had heard rumors that some high-ranking CEB officials and other influential people are not charged for their electricity. None of the consumers with whom we spoke with actually knew anyone who had done this. However, these rumors concerned them because they didn't want to pay higher tariffs to subsidize theft.

IV. Awareness and Knowledge of Regional Power Issues

A. Opinion Leaders and Consumers

The third objective of this study was to be able to characterize awareness and knowledge of regional power issues, particularly among Opinion Leaders. A key finding of this study is that:

- Most of the 103 Opinion Leaders we spoke with said they had limited awareness or knowledge of the power situation in other South Asian countries or of regional power issues.
- Many Opinion Leaders simply said they didn't know about these issues and others assumed the issues were similar throughout the region.

Therefore, most Opinion Leaders do not look at power issues through a regional prism.

Nepal's Opinion Leaders appeared to be the most aware of regional power issues and cooperation, particularly in regard to the potential for exporting Nepal's hydropower. Many of Nepal's Opinion Leaders feel India is not dealing fairly with Nepal and has favored Bhutan. Some do understand that trade is on a purely commercial basis, and are concerned that Nepal's hydro may be too expensive to sell to India, but most showed little understanding of the role that price played in power trade.

The majority of Sri Lankan Opinion Leaders that we interviewed believed that Sri Lanka's power situation is similar to that of other South Asian countries, although they could not elaborate on what that might mean. Interestingly, the media representative was the least knowledgeable about other countries (*"Not familiar with the general scenario in other South Asian countries."*), while some of the NGOs focused on how India provided free electricity to farmers in some areas and Sri Lanka does not.

Most Opinion Leaders we interviewed in Bangladesh had very little idea of the power situation in the other South Asian countries, although they assumed things were worse in Bangladesh. One opinion leader who represented consumers did point out the potential for socio-economic growth through regional power cooperation.

In India, all of the Opinion Leaders had very little idea of the power situation and issues in the other South Asian countries, and generally assumed, as their counterparts did in other countries, that the problems were similar, in part due to sharing a "common heritage."

Although Consumers were not asked about their knowledge power issues in other South Asian countries or across the region, Opinion Leaders pointed out that information for consumers about power issues at any level is very inadequate (see next section). Thus, it is unlikely that most Consumers have much awareness of power issues – aside from those that they directly experience – and their role in improving the power situation.

B. Adequacy and Reliability of Power Sector Information

When asked where they got trustworthy information on issues such as consumers' "willingness to pay," power theft, corruption, and distribution reform, most Opinion Leaders reported that reliable power sector information, particularly on consumer power issues, is scarce for all stakeholders. Indeed, many could not provide any articles, books, or studies that they would recommend on these subjects.

Both the amount of and access to information seems to be limited, with many gaps. According to one media representative, *"Information on regulation and consumer education is really lacking. Consumer education does not just comprise an advertisement on the television."* One Indian NGO described the steps it has taken to get accurate, reasonably current information. *"...there is only Information Technology! We have had to adopt unscrupulous ways to get information. Transparency brings in accountability. Losses in some subs-stations were written down as 70% when it was actually 30% - the figures were not checked. Then the data on connected load is about 20 years old."*

Some Opinion Leaders said that while a lot of literature is directed at power sector professionals, consumer issues are not the focus. In addition, they particularly emphasized that much more information needs to be targeted to the general public on consumer issues. Throughout the region, Opinion Leaders were concerned about consumers who have little knowledge of the sector and their rights and responsibilities. Some Indian Opinion Leaders cited instances where public hearings of the regulatory commissions, far from reaching out to people, had actually turned them away by using technical language or by attracting individuals or groups with strong political agendas that prevented others from participating comfortably.

Not surprisingly, the most credible source of information for most Opinion Leaders is personal contact, through one-on-one meetings, workshops and seminars, or even personal letters or e-mail from individuals they trust. Along this line, Opinion Leaders also see professional and business organizations (e.g., the Forum for Indian Regulators), and established NGOs and consultants, as credible sources of technical information, as are some government agencies (such as regulatory commissions). Faith in the government agencies varies widely from country to country, as well as across type of opinion leader. Some Opinion Leaders cited

particular magazines that they trusted, such as Powerline, India Power, Economic and Political Weekly, and Water Nepal.

While some stakeholders believe utilities are credible sources of information, many more said that they provide poor, inaccurate information. NGOs see utilities as less credible than do most government staff and policymakers. Because of perceived media biases, Opinion Leaders do not find media (newspapers, TV, radio) stories to be credible overall, although a few suggested putting “success stories” in the media. While they were not asked about the credibility of advertising in these media, the perception that such sources provide biased information would need to be taken into account.

In terms of the types of information that are needed, Opinion Leaders wanted to see more objective case studies, and reliable surveys and other social research conducted with consumers, with an eye to disseminating the results to both Opinion Leaders and to Consumers. Such research would need to be conducted by trustworthy sources such as established NGOs, consultants, or funding agencies.

In terms of effective outreach mechanisms for consumers, Opinion Leaders often had little advice, except that a great deal of effort was needed. Some felt that mass media would be the best way to get information out to consumers, while others suggested more targeted approaches.

V. Recommended Outreach Themes and Mechanisms

Reliable, credible power sector information needs to be provided to both Opinion Leaders and Consumers on the local, national, and regional level, particularly on consumer issues. The final objective of this research is to provide guidance for effective outreach themes and mechanisms to improve awareness and knowledge of power sector issues.

While SARI/Energy wants to achieve greater regional cooperation, we feel this research shows that goal will be difficult to accomplish without the underpinnings of local and national change, particularly in regard to consumer issues such as power theft, utility corruption, and poor utility services. For instance, it will be hard for utilities to sign contracts for power for which they may not be able to recover the costs. To build a foundation for regional cooperation, power situations within each country need to be improved and stakeholders must be able to see themselves as important instruments of change.

As concluded in the previous section, most Opinion Leaders take a local or national perspective and have very little “regional” insight; in fact, the sense of regional opportunities and purpose still needs to be developed. Many Opinion Leaders assume that the problems are the same everywhere, although this research points out that power sector issues often differ from country to country. Any awareness of regional solutions is scarce.

Consumers are generally trying to survive the current difficulties they face with power supply, tariffs, corruption, and customer services; little has been done to communicate with them about how they can contribute to improvements. At this point, it is difficult for most stakeholders to see very far beyond these daily problems.

Findings from this research, however, do suggest a set of general power sector themes that could be pursued in communications campaigns at local, national, and regional levels, through various outreach mechanisms. These themes emerged from suggestions that Opinion Leaders and Consumers made. Please note that if these themes are developed into creative and informational materials, both the content and outreach mechanisms should be further tested with target audiences before launch.

A. Themes

Opinion Leaders and Consumers suggested the following power sector issues/themes that could be used in communication campaigns to improve awareness about and involvement in power sector reforms. Please note that:

- These are broad themes, not the actual messages, upon which multi-pronged, integrated campaigns could be based. Campaign strategies, messages, materials, and media would all need to be developed.
- Whatever the theme, campaigns, messages, and outreach mechanisms would need to be tailored, if needed, to specific countries and stakeholder groups to be effective. For instance, while power theft is a major issue in three countries, it is not a major issue in Sri Lanka; to use this theme across all four countries, local intelligence should be used.
- Without underlying changes in services, actions, and laws, these themes cannot be effectively applied.
- Campaigns need to demonstrate how the issue affects target audiences.
- Campaigns need to point to steps the target audiences can take to address the issue.

1. Take Control: Stop power theft and corruption.

- **For Consumers:** Although this theme is most applicable to India, Bangladesh, and Nepal, the “take control” motto could also be applied to Sri Lankan concerns, or Sri Lanka could be used as an example of the benefits of low theft and corruption. At the very least, keeping Sri Lankans in the loop about progress on these fronts would help keep them informed of regional concerns and activities.

Where corruption and power theft are ingrained in the system and in behavior, consumers need to know the “facts” and to understand that these practices produce nothing but a downward spiral. In the long run, these practices will make the power more expensive for everyone and prevent improvements in power quality, reliability, and services. In addition, this type of campaign can incorporate appeals to “morality”; for instance, it can ask Consumers what type of future they are creating for their children if theft and corruption go unchecked. If supported by utility and government policies, consumers need to know how they can influence and eventually stop these behaviors, even though it will take time and effort.

- **For Opinion Leaders:** Leaders need to be encouraged and given the tools to implement policies that will decrease theft and corruption, from passing laws and regulations, to punishing and/or retraining utility staff, to frankly communicating about these issues. Like Consumers, Opinion Leaders need to hear the facts about the benefits of such reforms.

2. Take Part: Know your power rights and responsibilities

- **For Consumers:** Consumers need to know more about their role in power sector reform and the mechanisms for getting involved. They also need to know what their rights and responsibilities are. At this point, there is very little communication being provided to Consumers. The only way to effectively engage consumer participation is to show them how they will benefit from a change in the system, and how not changing the system will only make matters worse.
- **For Opinion Leaders:** Opinion Leaders need to be engaged in discussion about and support for Consumer rights and responsibilities. And, they need to be given the tools for communicating with Consumers about their rights and responsibilities.

3. Take Heart: And now for some good news about the power sector.

- **Consumers and Opinion Leaders:** This campaign would provide positive examples about steps that consumers, utilities, government, and other entities have taken to improve the power system and the benefits that have accrued. These examples would serve as touchstones and encouragement for greater involvement and action, and could range from small and heartwarming to significant statistics. While good things have occurred, they are often lost in the light of high tariffs, power outages, and poor services. This type of campaign would provide a forum to pinpoint successes, from both Consumer and Opinion Leader perspectives..

B. Outreach Mechanisms

Whatever mechanisms are chosen for communicating power sector themes, the road ahead is long and challenging and will required a great deal of communication and social marketing activities. Deciding on the appropriate outreach to use depends on a number of factors such as audience size, stated audience preferences, the desired outcomes, and the issue at hand.

In general, mass media advertising can be effective in raising awareness, especially if these media can be targeted to certain audiences, but it is harder to demonstrate its role in behavior change. If audiences are small and specialized, such as the Opinion Leaders in this study, mass media advertising often cannot effectively hit the mark. In addition, depending on the market, mass media can be very expensive. More personal approaches, of course, can also be expensive, especially if the audiences are large. We believe a variety of outreach mechanisms, from mass media to personal approaches, will be needed to reach a very diverse set of power sector stakeholders. The next sections suggest outreach avenues that either

the study participants suggested or that have worked in similar social marketing situations.

1. Opinion Leaders

- Person to person activities involving Opinion Leaders; these could be on a local, national, or regional basis, depending upon the topic. Such activities would include gatherings and workshops targeted to information sharing, discussion of issues and best practices, building of ongoing partnerships and relationships, and peer to peer learning activities.
- Business and professional organization communication vehicles, such as newsletters, conferences, and forums.
- Access to and promotion of reliable information sources. Ensure that government, NGO and consultant reports are accurate, accessible, and available. Concurrently, conduct and provide independent research (e.g. consumer surveys) whose results can be trusted.
- Place articles in targeted power sector magazines.

2. Consumers

- Person-to-person activities, including working with local associations, schools, and utility service centers. Participatory programs, e.g. model programs to root out utility staff corruption, are also very effective
- Targeted, local media can be used to entice involvement, introduce issues and raise awareness. For example, local street plays have been proven to be a very effective way of educating rural consumers about power issues.
- Educating school children to be activists about public issues has worked in the past and should be explored for power sector reforms.